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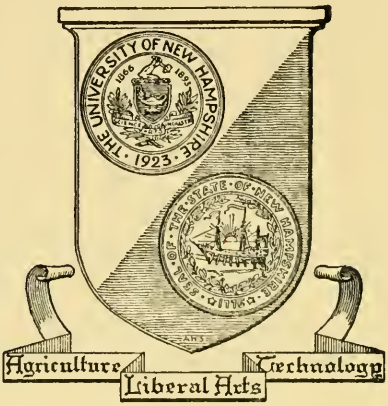

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Dairy Opportunity Areas
IN
New Hampshire

by
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DURHAM, N. H.

Dairy Opportunity Areas In New Hampshire

by

Harry C. Woodworth and John C. Holmes

Dairying is the chief agricultural enterprise in New Hampshire, but although dairy herds are kept in all occupied sections of the state, there are wide differences in the opportunities for commercial dairying. Consequently, the industry is on a sound footing and is expanding in certain areas, but in others is greatly handicapped and is declining.

These differences in opportunity can usually be traced to variations in market outlets, to the ease of cultivation and yielding capacity of the soil, the productivity of the pasture, and to the amount of tillage land on the farms. In areas where the tillage fields are large, level, free of stone, and fertile, where the pastures are improved and productive, the markets good and the marketing facilities adequate, the farms tend to be aggressively managed under improved practices which result in greater production of milk. Operators in areas without these favorable characteristics are handicapped, and hundreds of former commercial dairymen have found it necessary to abandon their farms. Dairying has practically disappeared in some communities where the conditions were unfavorable.

The trend is toward abandonment in those areas where the operators are most handicapped in producing and marketing their milk, although certain of the more enterprising families may carry on in these sections, and even with apparent success, for many years. A few men persist in dairying against great odds in unfavorable locations, but such situations will not usually induce others with equal energy and persistence to take their places. In other areas where the operators are less handicapped but must work against definite odds, commercial dairying is still carried on, but the future is doubtful. It will depend on price relationships in the industry as well as on the alternative opportunities available to the young men coming from those areas whether dairying on a commercial scale will be continued there.

New Hampshire's complicated pattern of land occupation obscures the real situation to most casual observers. There are so many residences of summer people, homes of business men employed in near-by cities, and estates under paid managers, that improved dwellings and large newly-painted white barns may have no relation to the opportunities for commercial farming at all. Because the situation is not just what meets the eye, many state and federal agencies, and many business firms and individuals have needed more accurate in-

formation concerning the real opportunities for commercial dairying. Detailed descriptions of each separate area are essential in planning intelligent agricultural conservation programs and are necessary in developing agricultural policy. This study was directed to fulfill this need.

Procedure

Data concerning the size and location of every dairy enterprise were obtained from town inventories and from the selectmen. Brief conferences on the productivity of fields and pastures, on the type of farms, the topography, the ease and difficulties of cultivation, the market outlets, and on the trend in dairying were held with individuals in each town. Many such individuals helped the field man divide the town maps into definite areas. Wherever it was possible to do so, these data were verified by reference to generalized soil maps and any available information about milk markets and milk routes was added. Field men made additional observations as they traveled through the towns and talked to the local people. Then the data for each town were weighed together and fitted into a pattern for each county and finally for the state as a whole.

The final result (as indicated in the maps shown in Figures 1 to 11) is based to a large extent on the experience and judgment of local people, although the authors have had the responsibility of analyzing these local viewpoints and checking the areas in a general way.

Description of Dairy Opportunity Areas[1]

The land areas were differentiated into four categories:[2]

1. Favorable areas: areas favorable for commercial dairying Production of roughage under conditions of advantage. Large fields of good soil. Farms capable of carrying at least ten cows. Good markets available and marketing facilities adequate. Market may be wholesale or retail.
2. Marginal areas: areas marginal for commercial dairying Production of roughage handicapped by small irregular fields. Markets only fair and production somewhat difficult. Area may have fair market but production resources may be very limited.

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[1] This classification concerns only opportunities in dairying. Some areas considered unfavorable for dairying are favorable for fruit or poultry.

[2] Large town maps are filed in the Department of Agricultural Economics, at the University of New Hampshire, and are available for reference. The size and location of each commercial dairy enterprise in the state is indicated on these maps. The favorable areas are subdivided into three subgroups, and the unfavorable areas into two, according to the degree of opportunity:

1. Favorable areas
   a. Most favorable
   b. Very favorable
   c. Favorable
2. Marginal
3. Unfavorable
   a. Unfavorable
   b. Very unfavorable
3. Non-agricultural

Town maps showing the size and location of commercial agricultural enterprises other than dairying are also on file.

3. Unfavorable areas: areas unfavorable for commercial dairying
   Production of roughage difficult. Market not good. Marketing facilities often not developed. Sometimes no pastures, or farms too small to support ten or more cows.
4. Non-agricultural areas: areas not farmed
   Mostly forest land. Usually rough and mountainous.

This differentiation into areas is based on considering the farm land of each group of farms as a unit in which the combination and pattern of tillage land, pasture land, and forest represents certain opportunities in dairy farming. The boundary lines roughly delineate the areas that would make up such a pattern. There is no intent to be exact in the inclusion of the forest land, and for this reason the size of the areas was neither measured nor estimated. For example, a favorable area along a river might include 20 farms in which there are a total of 900 acres of level tillage land, 1500 acres of rough but fairly productive pasture, 1800 acres of rough, stony woodland, and 300 acres of wasteland.

In New Hampshire there is usually a wide variation in size and character of farms in each locality. A few small impoverished farms may be interspersed among the better farms in a favorable dairy area. On the other hand, some very productive farms may be found isolated among semi-abandoned barren ones. The areas delimited on the county maps in Figures 1 to 11 describe only general conditions. There is no intent to infer that all farms in favorable areas represent good opportunities in dairying or that all farms in an unfavorable area are not productive.

The dairy operators in certain areas were handicapped for a long time by the delay in building good all-weather roads. The farms may have been productive but the daily trucking of milk over poor roads placed the operators at such a great disadvantage that the land and buildings on the farm could not be maintained. And now, although there may at last be adequate roads, the tillage land has "run out," the pastures have grown up to brush, and the buildings have deteriorated in the 20 years or more of semi-abandonment. It is usually not economic to redeem farms of this description for commercial dairying. Such locations may also have the further handicap of so small a volume of milk produced in the area that the daily marketing of this milk is rather costly. These considerations were included in this study and even where an area has potential possibilities of considerable volume of milk production, if the cost of development was prohibitive the area was rated as unfavorable. The price of milk in the next few decades is not likely to be sufficient to justify the expense of reclearing, rebuilding, and improving such farms.

Distribution of Farms by Size of Herds

It is important to consider the size of the dairy herds in each county and in the state as a whole in attempting to understand the production problems and to predict the labor needs and plan conservation practices for the area in question.

The town inventories record cows on almost 13,000 farms, but

over one-third of these have only one cow and 60 per cent have three cows or less. Assuming that these small herds of from one to three cows are kept for the most part for home use and are non-commercial herds, and that only the herds with four or more cows can be considered of commercial importance, there are 5,125 commercial herds in this state with a total of 57,450 cows. Of these commercial herds, 3,146 were made up of from four to ten cows; 1,448 herds, from 11 to 20 cows; and 531 herds contained over 20 cows.

These data suggest the advisability of adjusting educational and action programs to the particular needs of the different groups. The non-commercial operators should be urged to follow extensive methods of production and rely as much as possible on farm-produced feed. The utilization of milk for home use could be stressed. On the other hand, programs for farms with from four to ten cows should stress intensification of roughage yield practices and pasture improvement and the building up of the herd to at least ten cows since this is a better unit for commercial dairying than any smaller size. The emphasis in programs for larger farms might be placed on efficient organization as well as on intensive management practices, both of which should result in better yields of high quality roughage.

The distribution of farms by size of herds indicates that with modern milking machines available the requirement for hired skilled dairy labor should not be very acute except on 531 farms with over 21 cows. Operators with fewer cows and properly equipped with milking machines should be able to get along with unskilled help.

For reference purposes the distribution of farms according to size of herds for each county is shown in Tables 4 to 23.[3]

Location of Herds with Reference to Dairy Opportunity Areas

On each town map the individual herds were located with respect to the dairy opportunity areas. The distribution of herds by areas and by size was then compiled for each county and the state. A study of Tables 4 to 23 indicates that 55 per cent of the herds and 76 per cent of the cows are located in favorable areas, that 30 per cent of the herds and 13 per cent of the cows are in unfavorable areas, and that 15 per cent of the herds and 11 per cent of the cows are to be found in marginal areas.

Since commercial dairying in the unfavorable areas is handicapped and is gradually declining, the number and size of herds in these areas is of particular importance. While nearly a third of the farms reporting cows are located in these areas, the herds on these farms tend to be small. Of the 3,940 farms reporting cows in unfavorable areas, 3,273, or over 83 per cent, have from one to three cows; and 1,962 or 50 per cent have only one cow. There are 4,415 cows in the 667 commercial herds of three cows or more. Ninety-three farms have 1,364 cows in herds of ten or more, the only herds sufficiently large to warrant the expectation of an adequate income for a family.

About half of these farms in the unfavorable sections with ten or more cows are located in declining areas, six in very isolated areas,

[3] Data showing distribution of farms according to size of herds by towns is on file and available for reference in the Department of Agricultural Economics, University of New Hampshire.

twenty in villages, and twenty-two are special farms such as recreational hotels and summer estates. It is estimated that about half of these larger herds are more dependent on other than economic production of roughage or marketing for their continuance.

Even if the general decline in dairying on farms in these unfavorable areas continues, many locations will remain in use by families who are not dependent on dairying for their livelihood. Some families will keep one or more cows for their own use. The decline in commercial production in these locations will not be very significant and can be easily offset by an increase in production in the favorable areas. There is evidence that the general trend is toward expansion of commercial herds in the more favorable dairy sections and a gradual decline in the unfavorable areas. The conservation program, the educational activities, and the alternate possibilities of employment all contribute to these diverging trends.

The conservation practices and the educational program should be examined critically and adapted to the changing conditions in each type of area. Farmers in favorable areas should be encouraged to build a permanent dairy industry, and in the unfavorable sections the program might foster making the most of existing resources in dairying as long as they are available but directing the activities toward the development of other resources that can be more permanent.

TABLE 1. DISTRIBUTION OF FARMS AND COWS IN NEW HAMPSHIRE BY SIZE OF HERDS

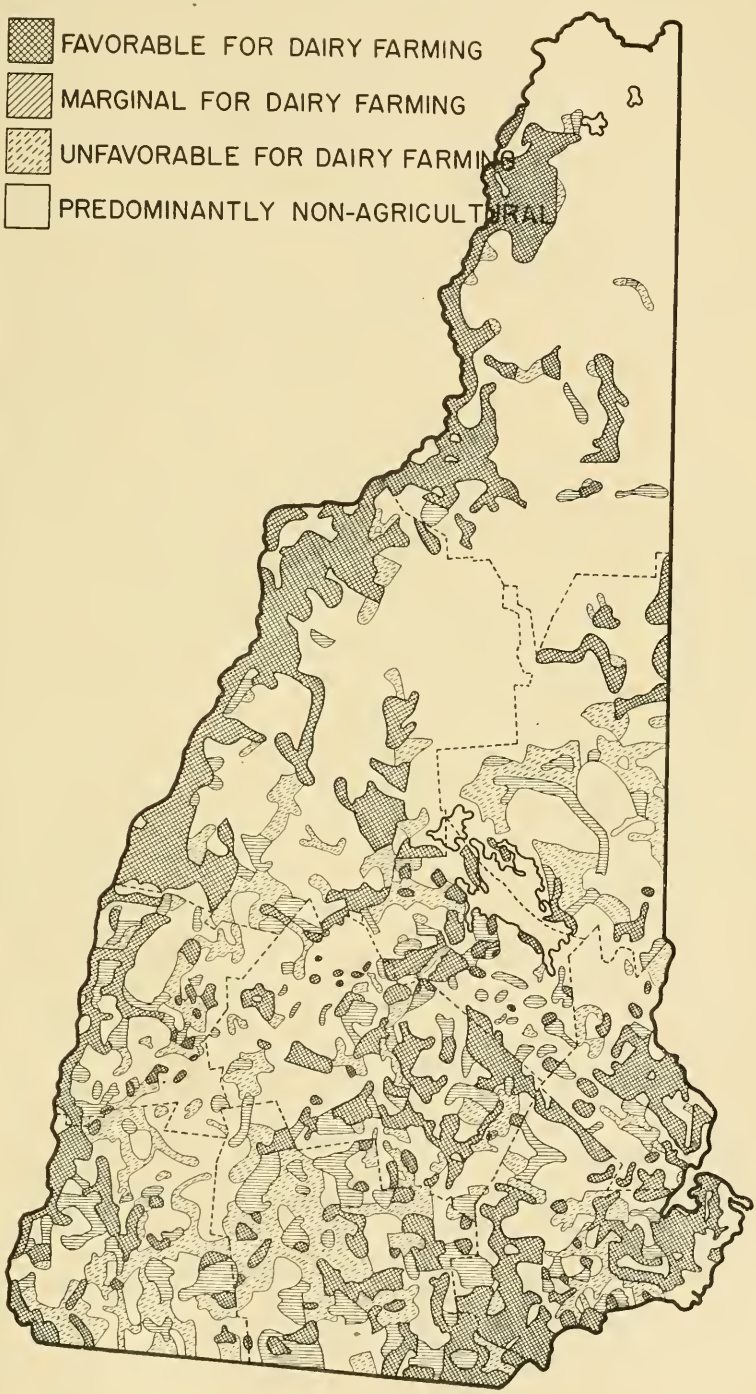
	Farms		Cows	
Size of herd	Number	Per cent	Number	Per cent
1	4,431	34.3	4,431	6.4
2	2,285	17.7	4,570	6.6
3	1,092	8.4	3,276	4.7
4	751	5.8	3,004	4.3
5	556	4.3	2,780	4.0
6	492	3.8	2,952	4.2
7	378	2.9	2,646	3.8
8	361	2.8	2,888	4.1
9	279	2.2	2,511	3.6
10	329	2.5	3,290	4.7
11 to 15	956	7.4	12,224	17.5
16 to 20	492	3.8	8,765	12.6
21 to 25	234	1.8	5,354	7.7
26 to 30	118	.9	3,282	4.7
31 to 35	73	.6	2,406	3.4
36 to 40	42	.3	1,596	2.3
over 40	64	.5	3,752	5.4
Total	12,933	100.0	69,727	100.0

TABLE 2. DISTRIBUTION OF HERDS AND COWS IN NEW HAMPSHIRE BY AREAS

	All areas		Favorable		Marginal		Unfavorable	
	Herds	Cows	Herds	Cows	Herds	Cows	Herds	Cows
Coos	1,002	8,478	820	7,853	68	259	114	366
Grafton	1,957	13,466	1,521	12,160	71	332	365	974
Carroll	839	2,790	278	1,254	194	629	367	907
Sullivan	1,044	5,191	470	3,277	213	993	361	921
Merrimack	1,890	8,352	834	5,277	273	1,135	783	1,940
Belknap	769	3,655	308	2,235	198	752	263	668
Strafford	749	3,649	448	2,744	69	277	232	628
Cheshire	1,230	5,865	425	3,911	236	894	569	1,060
Hillsboro	1,855	9,259	844	6,300	418	1,663	593	1,296
Rockingham	1,598	9,022	1,128	7,872	177	525	293	625
State	12,933	69,727	7,076	52,883	1,917	7,459	3,940	9,385
Per cent	100.0	100.0	54.7	75.8	14.8	10.7	30.5	13.5

TABLE 3. DISTRIBUTION OF HERDS AND COWS IN NEW HAMPSHIRE ACCORDING TO TYPE OF FARM AND DAIRY AREA

	All areas	Favorable areas	Marginal areas	Unfavorable areas
	No. herds	No. herds	No. herds	No. herds
Non-commercial herds (1 to 3 cows)	7,808 (60.4%)	3,286 (25.4%)	1,249 (9.7%)	3,273 (25.3%)
Commercial herds (over 4 cows)	5,125 (39.6%)	3,790 (29.3%)	668 (5.1%)	667 (5.2%)
Total	12,933 (100.0%)	7,076 (54.7%)	1,917 (14.8%)	3,940 (30.5%)
	No. cows	No. cows	No. cows	No. cows
Non-commercial herds (1 to 3 cows)	12,277 (17.6%)	5,275 (7.6%)	2,032 (2.9%)	4,970 (7.1%)
Commercial herds (over 4 cows)	57,450 (82.4%)	47,608 (68.3%)	5,427 (7.8%)	4,415 (6.3%)
Total	69,727 (100.0%)	52,883 (75.9%)	7,459 (10.7%)	9,385 (13.4%)


FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

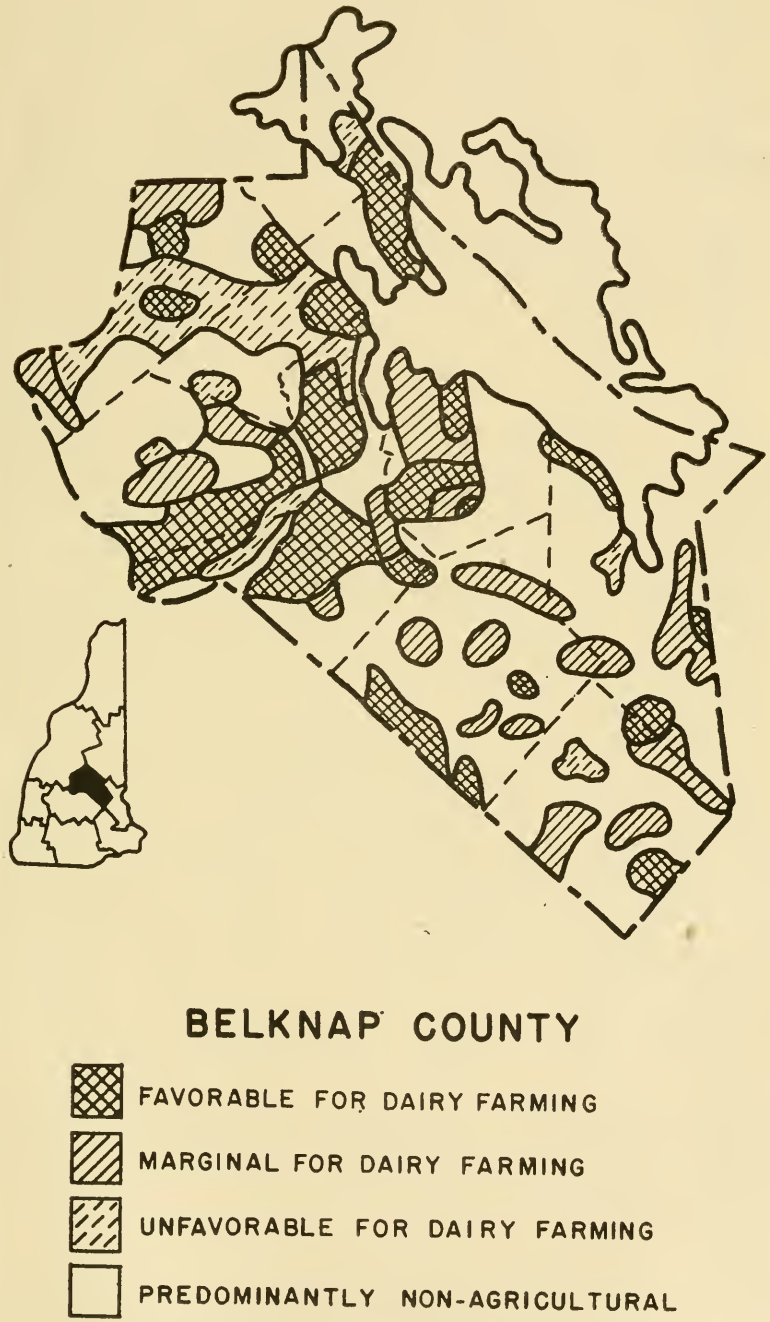
BELKNAP COUNTY

TABLE 4. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, BELKNAP COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	228		58		62		108	
2	162		46		44		72	
3	71	59.9%	28	17.1%	14	15.6%	29	27.2%
4	68		26		22		20	
5	35		15		11		9	
6	29		11		11		7	
7	32		18		6		8	
8	28		17		7		4	
9	12		7		3		2	
10	18	28.8%	11	13.6%	6	8.6%	1	6.6%
11 - 15	44		33		9		2	
16 - 20	25	9.2%	22	7.4%	3	1.5%	0	.3%
21 - 25	8		7		0		1	
26 - 30	3		3		0		0	
31 - 35	3		3		0		0	
36 - 40	1		1		0		0	
over 40	2	2.1%	2	2.0%	0		0	.1%
Total farms	769	100.0%	308	40.1%	198	25.7%	263	34.2%

TABLE 5. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, BELKNAP COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	228		58		62		108	
2	324		92		88		144	
3	213	20.9%	84	6.3%	42	5.3%	87	9.3%
4	272		104		88		80	
5	175		75		55		45	
6	174		66		66		42	
7	224		126		42		56	
8	224		136		56		32	
9	108		63		27		18	
10	180	37.1%	110	18.6%	60	10.8%	10	7.7%
11 - 15	557		421		112		24	
16 - 20	457	27.7%	403	22.5%	54	4.5%	0	.7%
21 - 25	182		160		0		22	
26 - 30	80		80		0		0	
31 - 35	96		96		0		0	
36 - 40	37		37		0		0	
over 40	124	14.3%	124	13.7%	0		0	
Total cows	3,655	100.0%	2,235	61.1%	752	20.6%	668	18.3%


BELKNAP COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

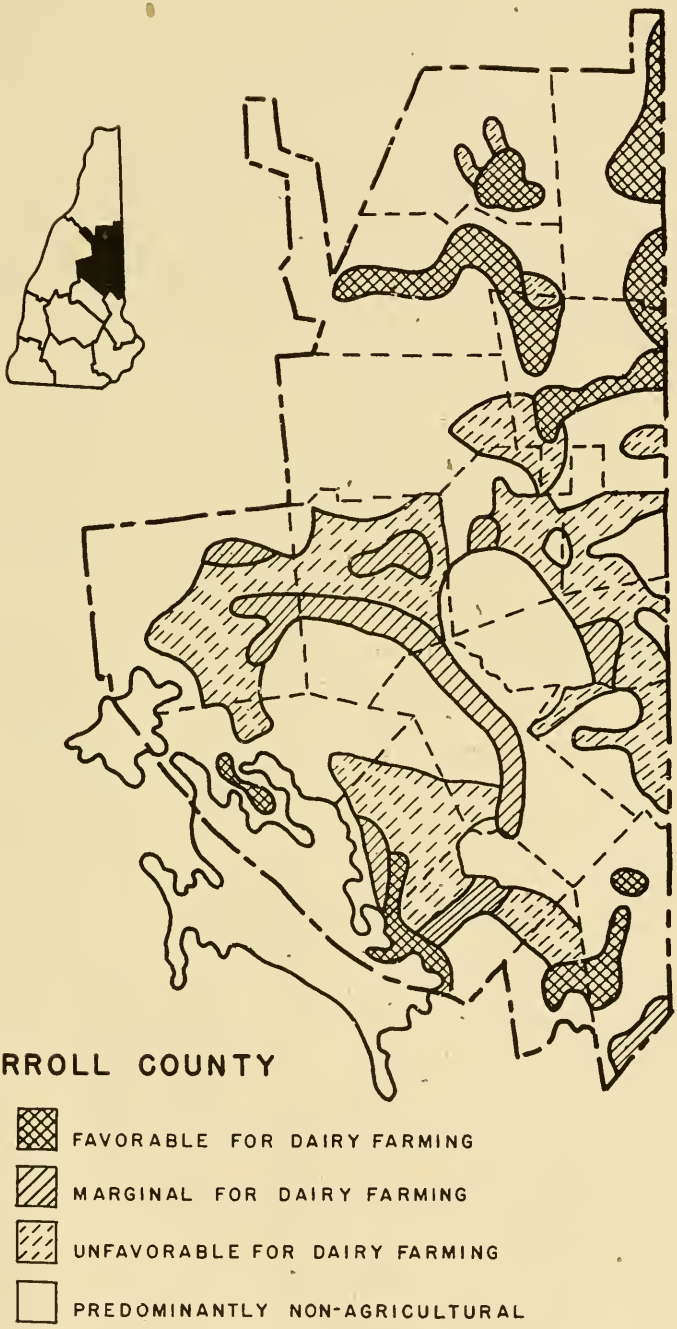
CARROLL COUNTY

TABLE 6. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, CARROLL COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	337		96		80		161	
2	184		43		39		102	
3	89	72.7%	34	20.6%	19	16.4%	36	35.7%
4	63		14		19		30	
5	41		20		8		13	
6	23		14		2		7	
7	23		13		7		3	
8	12		5		4		3	
9	8		5		3		0	
10	8	21.2%	3	8.8%	4	5.6%	1	6.8%
11 - 15	33		17		7		9	
16 - 20	10	5.1%	7	2.9%	1	.9%	2	1.3%
21 - 25	5		5		0		0	
26 - 30	2		1		1		0	
31 - 35	0		0		0		0	
36 - 40	1		1		0		0	
over 40	0	1.0%	0	.8%	0	.2%	0	
Total farms	839	100.0%	278	33.1%	194	23.1%	367	43.8%

TABLE 7. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, CARROLL COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	337		96		80		161	
2	368		86		78		204	
3	267	34.8%	102	10.2%	57	7.7%	108	16.9%
4	252		56		76		120	
5	205		100		40		65	
6	138		84		12		42	
7	161		91		49		21	
8	96		40		32		24	
9	72		45		27		0	
10	80	36.0%	30	16.0%	40	9.9%	10	10.1%
11 - 15	434		225		92		117	
16 - 20	174	21.8%	122	12.4%	17	3.9%	35	5.5%
21 - 25	111		111		0		0	
26 - 30	56		27		29		0	
31 - 35	0		0		0		0	
36 - 40	39		39		0		0	
over 40	0	7.4%	0	6.3%	0	1.1%	0	
Total cows	2,790	100.0%	1,254	44.9%	629	22.6%	907	32.5%


CARROLL COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

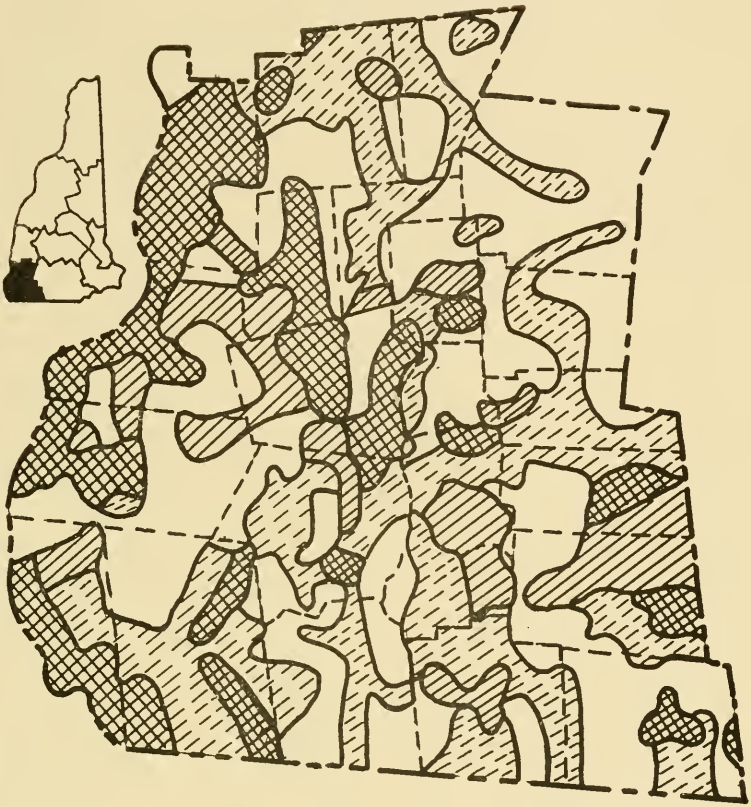
CHESHIRE COUNTY

TABLE 8. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, CHESHIRE COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	498		102		76		320	
2	239		54		46		139	
3	105	68.5%	27	14.9%	29	12.3%	49	41.3%
4	68		20		17		31	
5	48		17		16		15	
6	38		17		14		7	
7	19		11		3		5	
8	34		24		10		0	
9	16		11		5		0	
10	21	19.8%	17	9.5%	3	5.5%	1	4.8%
11 - 15	63		47		14		2	
16 - 20	32	7.7%	30	6.3%	2	1.3%	0	0.1%
21 - 25	19		18		1		0	
26 - 30	9		9		0		0	
31 - 35	11		11		0		0	
36 - 40	4		4		0		0	
over 40	6	4.0%	6	3.9%	0	.1%	0	
Total farms	1,230	100.0%	425	34.6%	236	19.2%	569	46.2%

TABLE 9. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, CHESHIRE COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	498		102		76		320	
2	478		108		92		278	
3	315	22.0%	81	5.0%	87	4.3%	147	12.7%
4	272		80		68		124	
5	240		85		80		75	
6	228		102		84		42	
7	133		77		21		35	
8	272		192		80		0	
9	144		99		45		0	
10	210	25.6%	170	13.7%	30	7.0%	10	4.9%
11 - 15	796		593		174		29	
16 - 20	553	23.0%	520	19.0%	33	3.5%	0	.5%
21 - 25	449		425		24		0	
26 - 30	261		261		0		0	
31 - 35	362		362		0		0	
36 - 40	153		153		0		0	
over 40	501	29.4%	501	29.0%	0	.4%	0	
Total cows	5,865	100.0%	3,911	66.7%	894	15.2%	1,060	18.1%


CHESHIRE COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

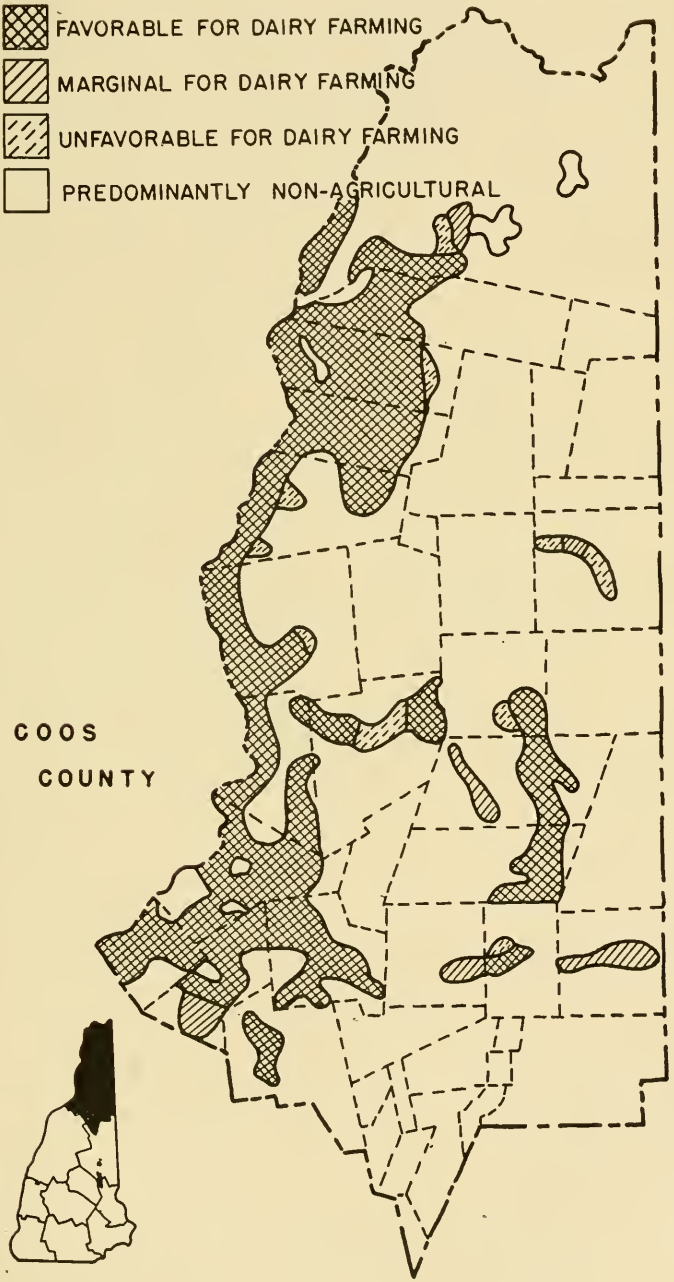
COOS COUNTY

TABLE 10. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, COOS COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	203		133		22		48	
2	131		87		18		26	
3	54	38.7%	36	25.5%	6	4.6%	12	8.6%
4	49		31		9		9	
5	41		35		3		3	
6	42		39		1		2	
7	40		38		1		1	
8	34		28		2		4	
9	36		34		0		2	
10	46	28.7%	45	25.0%	1	1.7%	0	2.1%
11 - 15	162		157		1		4	
16 - 20	80	24.2%	76	23.3%	2	.3%	2	.6%
21 - 25	46		44		1		1	
26 - 30	17		16		1		0	
31 - 35	9		9		0		0	
36 - 40	8		8		0		0	
over 40	4	8.4%	4	8.0%	0	.2%	0	.1%
Total farms	1,002	100.0%	820	81.8%	68	6.8%	114	11.4%

TABLE 11. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, COOS COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	203		133		22		48	
2	262		174		36		52	
3	162	7.4%	108	4.9%	18	.9%	36	1.6%
4	196		124		36		36	
5	205		175		15		15	
6	252		234		6		12	
7	280		266		7		7	
8	272		224		16		32	
9	324		306		0		18	
10	460	23.5%	450	21.0%	10	1.1%	0	1.4%
11 - 15	2,110		2,047		12		51	
16 - 20	1,408	41.5%	1,337	39.9%	34	.5%	37	1.1%
21 - 25	1,063		1,020		21		22	
26 - 30	471		445		26		0	
31 - 35	302		302		0		0	
36 - 40	311		311		0		0	
over 40	197	27.6%	197	26.8%	0	.6%	0	.2%
Total cows	8,478	100.0%	7,853	92.6%	259	3.1%	366	4.3%


FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL
COOS
COUNTY

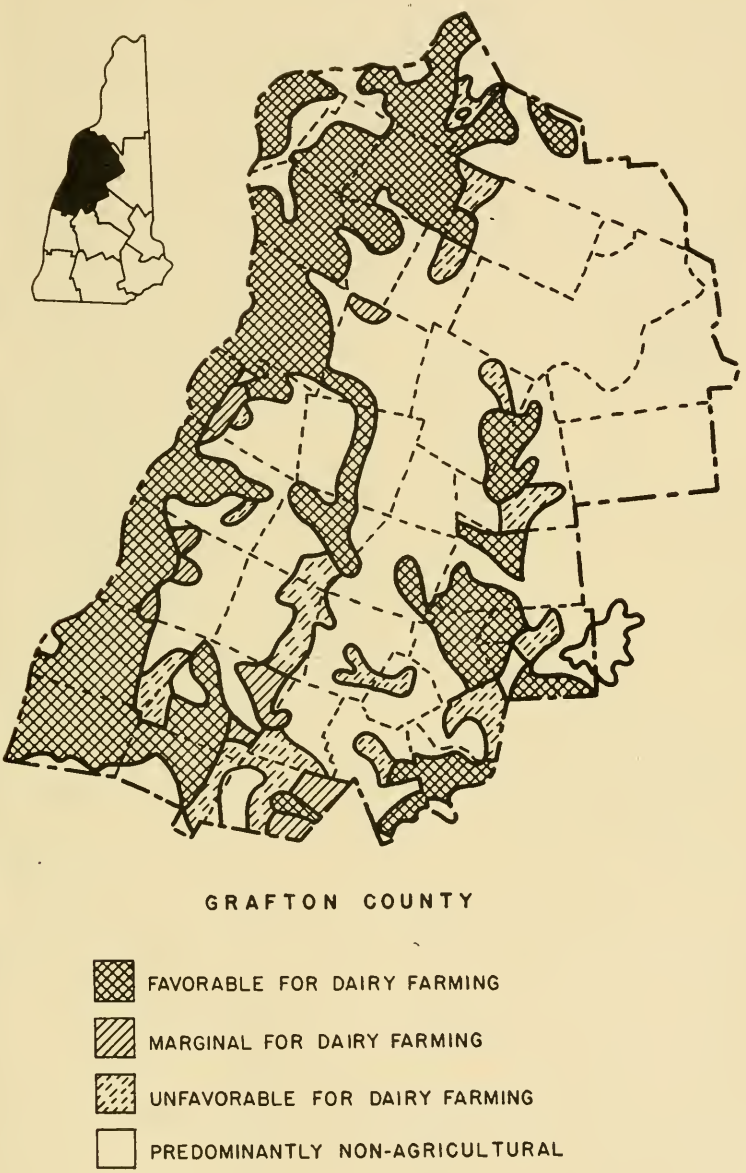
GRAFTON COUNTY

TABLE 12. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, GRAFTON COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	579		391		18		170	
2	298		196		16		86	
3	151	52.5%	103	35.3%	6	2.0%	42	15.2%
4	94		74		3		17	
5	81		64		5		12	
6	84		70		2		12	
7	65		52		6		7	
8	60		52		5		3	
9	48		41		2		5	
10	56	24.9%	53	20.7%	0	1.2%	3	3.0%
11 - 15	191		182		5		4	
16 - 20	111	15.4%	107	14.8%	2	.3%	2	.3%
21 - 25	61		59		1		1	
26 - 30	27		27		0		0	
31 - 35	22		22		0		0	
36 - 40	10		10		0		0	
over 40	19	7.2%	18	6.9%	0	.1%	1	.2%
Total farms	1,957	100.0%	1,521	77.7%	71	3.6%	365	18.7%

TABLE 13. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, GRAFTON COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	579		391		18		170	
2	596		392		32		172	
3	453	12.1%	309	8.1%	18	.5%	126	3.5%
4	376		296		12		68	
5	405		320		25		60	
6	504		420		12		72	
7	455		364		42		49	
8	480		416		40		24	
9	432		369		18		45	
10	560	23.8%	530	20.2%	0	1.1%	30	2.5%
11 - 15	2,456		2,343		60		53	
16 - 20	1,996	33.1%	1,928	31.7%	33	.7%	35	.7%
21 - 25	1,396		1,352		22		22	
26 - 30	760		760		0		0	
31 - 35	723		723		0		0	
36 - 40	374		374		0		0	
over 40	921	31.0%	873	30.3%	0	.2%	48	.5%
Total cows	13,466	100.0%	12,160	90.3%	332	2.5%	974	7.2%


GRAFTON COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

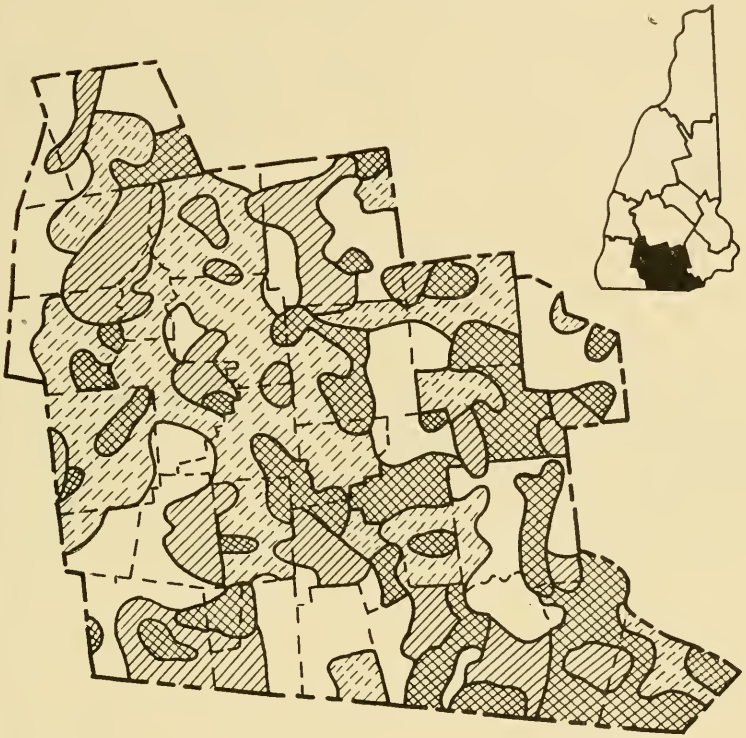
HILLSBOROUGH COUNTY

TABLE 14. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, HILLSBOROUGH COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	749		248		161		340	
2	301		94		89		118	
3	147	64.5%	59	21.6%	33	15.2%	55	27.7%
4	89		37		23		29	
5	64		31		17		16	
6	66		31		24		11	
7	45		33		7		5	
8	50		39		10		1	
9	43		31		8		4	
10	42	21.5%	32	12.6%	6	5.1%	4	3.8%
11 - 15	133		102		26		5	
16 - 20	63	10.6%	52	8.3%	8	1.8%	3	.5%
21 - 25	26		21		4		1	
26 - 30	19		18		1		0	
31 - 35	4		3		0		1	
36 - 40	4		4		0		0	
over 40	10	3.4%	9	3.0%	1	.3%	0	.1%
Total farms	1,855	100.0%	844	45.5%	418	22.4%	593	32.1%

TABLE 15. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, HILLSBOROUGH COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	749		248		161		340	
2	602		188		178		236	
3	441	19.4%	177	6.7%	99	4.7%	165	8.0%
4	356		148		92		116	
5	320		155		85		80	
6	396		186		144		66	
7	315		231		49		35	
8	400		312		80		8	
9	387		279		72		36	
10	420	28.0%	320	17.6%	60	6.3%	40	4.1%
11 - 15	1,707		1,311		331		65	
16 - 20	1,127	30.6%	931	24.2%	142	5.1%	54	1.3%
21 - 25	589		484		84		21	
26 - 30	513		487		26		0	
31 - 35	132		98		0		34	
36 - 40	153		153		0		0	
over 40	652	22.0%	592	19.5%	60	1.9%	0	.6%
Total cows	9,259	100.0%	6,300	68.0%	1,663	18.0%	1,296	14.0%


HILLSBORO COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

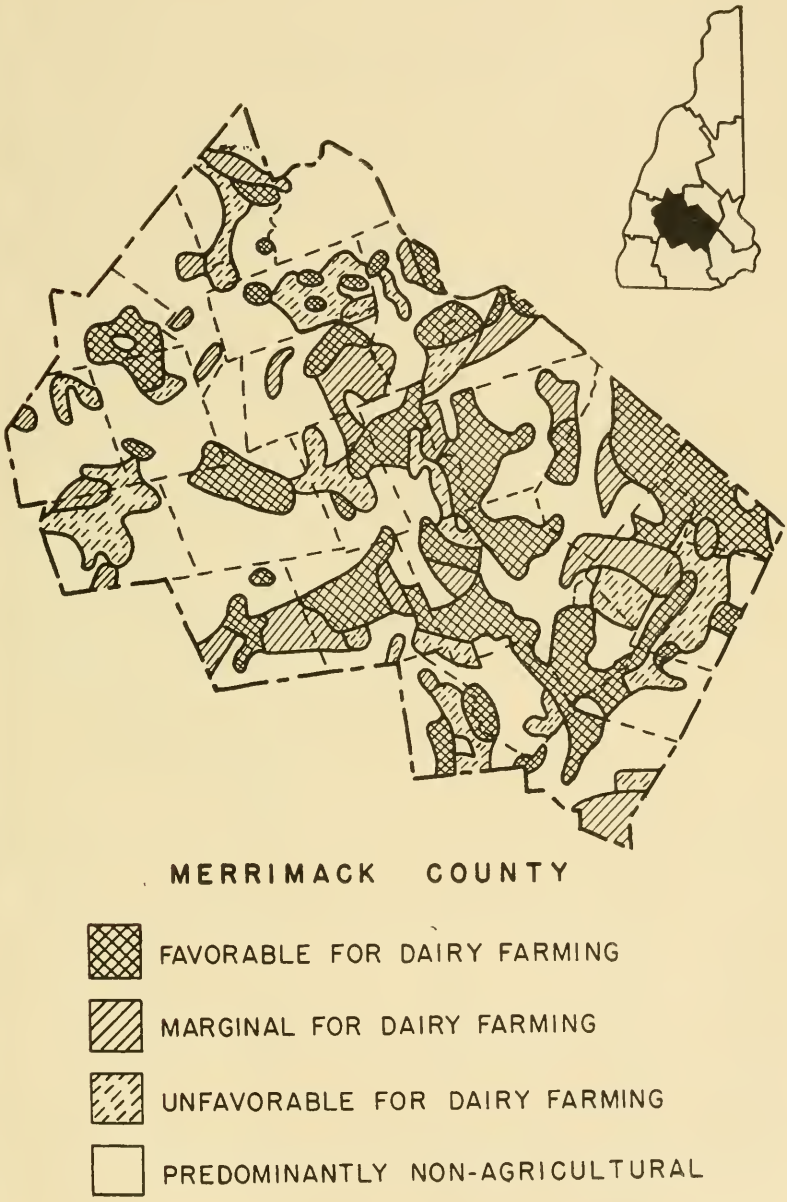
MERRIMACK COUNTY

TABLE 16. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, MERRIMACK COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	729		247		95		387	
2	343		124		48		171	
3	175	66.0%	73	23.5%	27	9.0%	75	33.5%
4	112		39		24		49	
5	91		41		23		27	
6	76		40		14		22	
7	47		29		2		16	
8	49		32		6		11	
9	36		22		6		8	
10	28	23.2%	20	11.8%	4	4.2%	4	7.2%
11 - 15	102		82		14		6	
16 - 20	45	7.8%	37	6.3%	4	.9%	4	.6%
21 - 25	34		28		3		3	
26 - 30	10		8		2		0	
31 - 35	6		6		0		0	
36 - 40	1		1		0		0	
over 40	6	3.0%	5	2.5%	1	.3%	0	.2%
Total farms	1,890	100.0%	834	44.1%	273	14.4%	783	41.5%

TABLE 17. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, MERRIMACK COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	729		247		95		387	
2	686		248		96		342	
3	525	23.2%	219	8.5%	81	3.3%	225	11.4%
4	448		156		46		196	
5	455		205		115		135	
6	456		240		84		132	
7	329		203		14		112	
8	392		256		48		88	
9	324		198		54		72	
10	280	32.2%	200	17.5%	40	5.4%	40	9.3%
11 - 15	1,296		1,046		175		75	
16 - 20	803	25.1%	662	20.5%	70	2.9%	71	1.7%
21 - 25	777		644		68		65	
26 - 30	284		226		58		0	
31 - 35	201		201		0		0	
36 - 40	38		38		0		0	
over 40	329	19.5%	288	16.7%	41	2.0%	0	.8%
Total cows	8,352	100.0%	5,277	63.2%	1,135	13.6%	1,940	23.2%


MERRIMACK COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

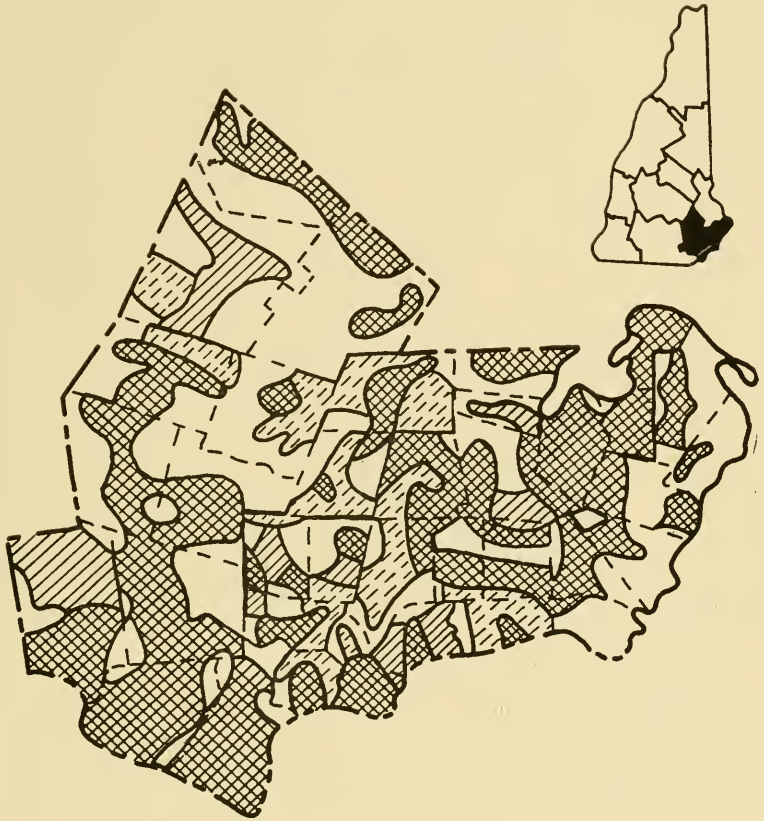
ROCKINGHAM COUNTY

TABLE 18. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, ROCKINGHAM COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	534		319		65		150	
2	294		166		53		75	
3	138	60.5%	87	35.8%	22	8.8%	29	15.9%
4	94		71		9		14	
5	59		42		7		10	
6	53		46		3		4	
7	48		39		5		4	
8	35		31		3		1	
9	35		32		1		2	
10	44	23.0%	41	18.9%	3	1.9%	0	2.2%
11 - 15	129		121		4		4	
16 - 20	68	12.3%	67	11.8%	1	.3%	0	.2%
21 - 25	20		20		0		0	
26 - 30	18		18		0		0	
31 - 35	11		11		0		0	
36 - 40	7		6		1		0	
over 40	11	4.2%	11	4.1%	0	.1%	0	
Total farms	1,598	100.0%	1,128	70.6%	177	11.1%	293	18.3%

TABLE 19. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, ROCKINGHAM COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	534		319		65		150	
2	588		332		106		150	
3	414	17.0%	261	10.1%	66	2.6%	87	4.3%
4	376		284		36		56	
5	295		210		35		50	
6	318		276		18		24	
7	336		273		35		28	
8	280		248		24		8	
9	315		288		9		18	
10	440	26.2%	410	22.0%	30	2.1%	0	2.1%
11 - 15	1,621		1,519		48		54	
16 - 20	1,195	31.2%	1,179	30.0%	16	.7%	0	.5%
21 - 25	443		443		0		0	
26 - 30	494		494		0		0	
31 - 35	359		359		0		0	
36 - 40	263		226		37		0	
over 40	751	25.6%	751	25.2%	0	.4%	0	
Total cows	9,022	100.0%	7,872	87.3%	525	5.8%	625	6.9%


ROCKINGHAM COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

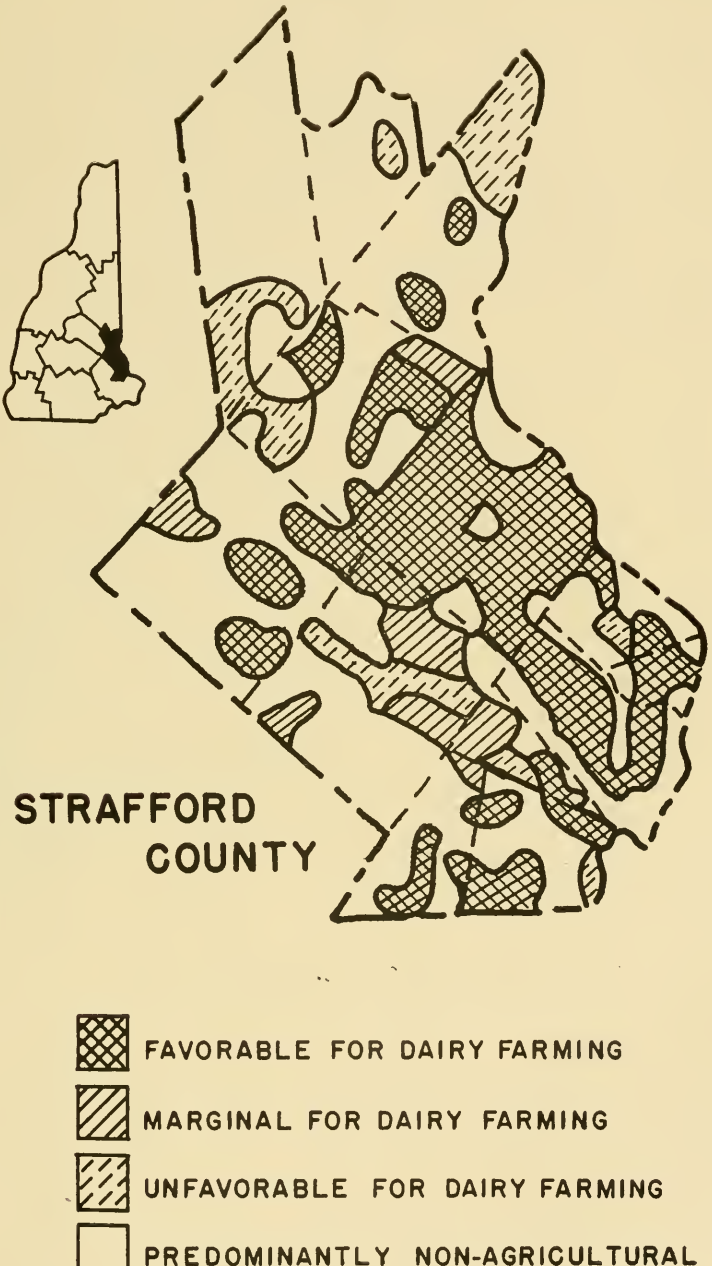
STRAFFORD COUNTY

TABLE 20. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, STRAFFORD COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	241		109		17		115	
2	159		85		16		58	
3	58	61.1%	30	29.9%	9	5.6%	19	25.6%
4	54		34		7		13	
5	41		33		3		5	
6	26		19		4		3	
7	21		16		3		2	
8	22		18		1		3	
9	16		13		0		3	
10	24	27.2%	18	20.2%	4	2.9%	2	4.1%
11 - 15	40		31		4		5	
16 - 20	26	8.9%	22	7.1%	1	.7%	3	1.1%
21 - 25	7		7		0		0	
26 - 30	6		6		0		0	
31 - 35	2		2		0		0	
36 - 40	2		2		0		0	
over 40	4	2.8%	3	2.6%	0		1	.2%
Total farms	749	100.0%	448	59.8%	69	9.2%	232	31.0%

TABLE 21. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, STRAFFORD COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	241		109		17		115	
2	318		170		32		116	
3	174	20.1%	90	10.1%	27	2.1%	57	7.9%
4	216		136		28		52	
5	205		165		15		25	
6	156		114		24		18	
7	147		112		21		14	
8	176		144		8		24	
9	144		117		0		27	
10	240	35.2%	180	26.5%	40	3.7%	20	5.0%
11 - 15	498		389		48		61	
16 - 20	474	26.6%	400	21.6%	17	1.8%	51	3.2%
21 - 25	163		163		0		0	
26 - 30	167		167		0		0	
31 - 35	65		65		0		0	
36 - 40	77		77		0		0	
over 40	188	18.1%	146	16.9%	0		42	1.2%
Total cows	3,649	100.0%	2,744	75.1%	277	7.6%	628	17.3%


STRAFFORD
COUNTY
FAVORABLE FOR DAIRY FARMING
MARGINAL FOR DAIRY FARMING
UNFAVORABLE FOR DAIRY FARMING
PREDOMINANTLY NON-AGRICULTURAL

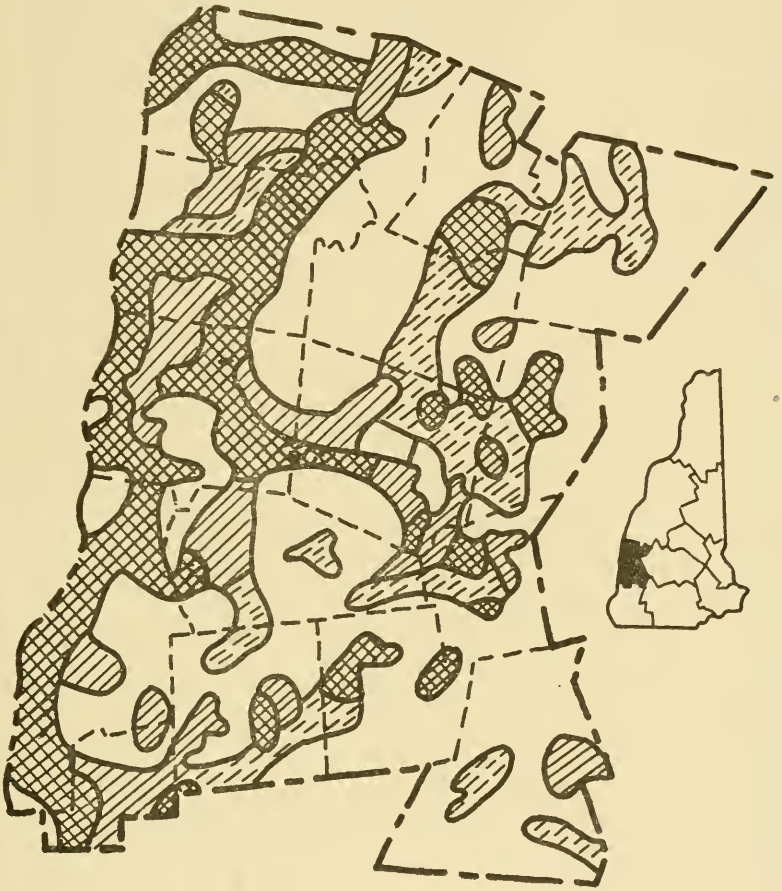
SULLIVAN COUNTY

TABLE 22. DISTRIBUTION OF FARMS BY SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, SULLIVAN COUNTY, N. H.

Size of herd (No. of cows)	Number of farms							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	333		113		57		163	
2	174		56		40		78	
3	104	58.5%	42	20.2%	22	11.4%	40	26.9%
4	60		24		9		27	
5	55		21		17		17	
6	55		26		15		14	
7	38		24		11		3	
8	37		21		9		7	
9	29		21		6		2	
10	42	30.3%	26	15.6%	10	7.4%	6	7.3%
11 - 15	59		43		12		4	
16 - 20	32	8.7%	30	7.0%	2	1.3%	0	.4%
21 - 25	8		7		1		0	
26 - 30	7		7		0		0	
31 - 35	5		3		2		0	
36 - 40	4		4		0		0	
over 40	2	2.5%	2	2.2%	0	.3%	0	
Total farms	1,044	100.0%	470	45.0%	213	20.4%	361	34.6%

TABLE 23. DISTRIBUTION OF COWS ACCORDING TO SIZE OF MILKING HERDS AND BY DAIRY OPPORTUNITY AREAS, SULLIVAN COUNTY, N. H.

Size of herd (No. of cows)	Number of cows							
	All areas		Favorable areas		Marginal areas		Unfavorable areas	
1	333		113		57		163	
2	348		112		80		156	
3	312	19.1%	126	6.8%	66	3.9%	120	8.4%
4	240		96		36		108	
5	275		105		85		85	
6	330		156		90		84	
7	266		168		77		21	
8	296		168		72		56	
9	261		189		54		18	
10	420	40.2%	260	22.0%	100	9.9%	60	8.3%
11 - 15	749		548		151		50	
16 - 20	578	25.6%	543	21.0%	35	3.6%	0	1.0%
21 - 25	181		157		24		0	
26 - 30	196		196		0		0	
31 - 35	166		100		66		0	
36 - 40	151		151		0		0	
over 40	89	15.1%	89	13.3%	0	1.8%	0	
Total cows	5,191	100.0%	3,277	63.1%	993	19.2%	921	17.7%


SULLIVAN COUNTY
FAVORABLE FOR DAIRY FARMING
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